

Atty. Dkt. No. 016907-0935

the antiferromagnetic layer comprising an alloy of NM, where N comprises Pt and M comprises Mn; and

the first ferromagnetic layer consists essentially of CoFe.

12 \hat{A} 44. A magnetoresistance effect element as set forth in claim 43, wherein said NM alloy consists essentially of $Pt_{100-x}Mn_x$, where x is an atomic % number in the range of $24 \leq x \leq 75$.

13 \hat{A} 45. A magnetoresistance effect element as set forth in claim 44, wherein said NM alloy consists essentially of $Pt_{100-x}Mn_x$, where x is an atomic % number in the range of $40 \leq x \leq 70$.

14 \hat{A} 46. A magnetoresistance effect element as set forth in claim 44, wherein said alloy consists essentially of $Pt_{100-x}Mn_x$, where x is an atomic % number in the range of $24 \leq x \leq 35$.

13 \hat{A} 47. A magnetoresistance effect element as set forth in claim 44, wherein said NM alloy consists essentially of $Pt_{100-x}Mn_x$, where x is an atomic % number in the range of $40 < x \leq 75$.

15 \hat{A} 48. A magnetoresistance effect element as set forth in claim 43, wherein N comprises Pt and at least one element N' selected from the group consisting of Fe, Co, Pd and Ni. ← ?

16 \hat{A} 49. A magnetoresistance effect element as set forth in claim 48, wherein said alloy has a ratio between Pt and N' represented by $Pt_{100-y}N'_y$, where y is an atomic % number in the range of $0 < y < 30$.

21 \hat{A} 50. A magnetoresistance effect element as set forth in claim 49, wherein y is an atomic % number in the range of $1 \leq y \leq 10$.

21 \hat{A} 51. A magnetoresistance effect element as set forth in claim 43, wherein said

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M comprises Mn and at least one element M' selected from the group consisting of transition metals, rare earth metals, and half metals.

17 ~ 52. A magnetoresistance effect element as set forth in claim 43, wherein said NM alloy has a tetragonal crystalline structure.

19 ~ 53. A magnetoresistance effect element as set forth in claim 43, wherein the antiferromagnetic layer has a film thickness larger than that of the first ferromagnetic layer.

39 ~ 54. A magnetoresistance effect element as set forth in claim 43, wherein the antiferromagnetic layer is provided on the ferromagnetic layer.

38 ~ 55. A magnetic head comprising a magnetoresistance effect element as set forth in claim 43.

Please add the following new claims:

56. A magnetoresistance effect element comprising:

a spin valve film comprising a first ferromagnetic layer, a nonmagnetic layer, a second ferromagnetic layer, and an antiferromagnetic layer, wherein the nonmagnetic layer is provided between the first and second ferromagnetic layers, and the antiferromagnetic layer is provided adjacent to the first ferromagnetic layer;

the antiferromagnetic layer comprising an alloy of NM, where N comprises Pt and M comprises Mn; and

the first ferromagnetic layer consists of CoFe.